BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of PUBLIC UTILITIES COMMISSION Instituting a Proceeding to Investigate the Implementation of Feed-in Tariffs	)	DOCKET NO. 2008-0273

OPENING STATEMENT OF POSITION AND PROPOSAL FOR FEED-IN TARIFF OF CLEAN ENERGY MAUI LLC

AND

CERTIFICATE OF SERVICE

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CLEAN ENERGY MAUI LLC respectfully submits this Statement of Position and Proposal for Feed-in Tariff.

Purpose of Project-Based Feed-in Tariffs (PBFiTs)

1. What, if any, purpose do PBFiTs play in meeting Hawaii's clean energy and energy independence goals, given Hawaii's existing renewable energy purchase requirements by utilities?

   Statement of Position: A German-style feed-in tariff is Hawaii's best and only chance to achieve and exceed RPS goals. It encourages rapid development of renewable energy (RE) projects by creating the customer certainty and revenue certainty that project developers need to obtain financing for such development. In order to work, a FIT needs to be free of caps, provide adequate prices and long contract times.
   With a correctly designed FIT, Hawaii will see billions of dollars of renewable investments. Without it, Hawaii will continue to see very slow development of renewables and cute television commercials.

2. What are the potential benefits and adverse consequences of PBFiTs for the utilities, ratepayers and the state of Hawaii?

Statement of Position: A correctly designed FIT will create a large amount of renewable energy development in Hawaii. The utilities will benefit from meeting the RPS goals. They will lose their dominance in electricity generation, which may or may not lead to a reduction of profits, depending on the result of the decoupling docket. Ratepayers will see reduced rates, because renewable energy, on the average, is cheaper than oil energy. Their savings will accelerate as oil prices rise due to inflation and peak oil. The state of Hawaii will see the rise of a renewable energy sector many times the size of the current electric utilities.

3. Why is or is not the PBFiT the superior methodology to meet Hawaii's clean energy and energy independence goals?

Statement of Position: In comparing successful and unsuccessful adoptions of renewables by countries and states it is clearly evident that a correctly designed FIT furthers renewable deployment, economic growth and benefits for the environment. Germany now has 50% of all worldwide installations of windmills and solar panels due to the FIT.

The reason is that a government-issued FIT takes away the utilities' power to restrict independent renewable energy development. This allows a free-market, entrepreneurial economy to arise and supplant a central planning economy.

(A FIT is not a tariff sheet developed by a utility, but an order by the government to force the purchase of all available renewable energy at a rate profitable for the developer)

In particular, oorrectly designed FITs are superior to the Competitive Bidding Framework and penalty-based renewable portfolio standard (RPS) quotas for the development of utility-distributed RE generation because:

(1) price and revenue certainty of FiTs encourage the rapid development of RE projects;

(2) for developers and their investors the certainty of FiTs encourage the rapid development of RE projects;

(3) unlike RPS, the incentive effect of FiTs encouraging the rapid development of RE generation does not expire when a RE production quota is achieved by the utility;

(4) making utility-developed RE projects eligible for FiTs encourages rapid RE development;

(5) ratepayers will save the subsidy cost to ratepayers of renewable energy certificates (RECs) under RPS;

(6) FiTs encourage diversity of renewable energy sources and rapid RE development, lowering the risk and therefore, the cost to the public of RE development;

(7) FiTs are transparent, unlike utility decision-making under Competitive Bidding and RPS, lowering risk and costs to the public of RE development; and

(8) FiT is a performance incentive, encouraging maximum output per dollar of subsidy cost to the ratepayer and thus lowering the subsidy cost to the ratepayer.

Legal Issues

4. What, if any, modifications are prudent or necessary to existing federal or state laws, rules, regulations or other requirements to remove any barriers or to facilitate the implementation of a feed-in tariff not based on avoided costs?

Statement of Position: The following modifications are prudent or necessary to facilitate the implementation of a feed-in tariff not based on avoided costs:

(1) The avoided cost ceiling under HRS section 269-27.2 should be changed back to an avoided cost floor, so that HRS section 269-27.2 does not prohibit payment of a feed-in tariff rate in excess of avoided cost;

(2) To avoid unnecessary imposition of costs on the taxpaying public, a renewable energy generator that obtains a feed-in tariff rate should not be able to claim the renewable energy technology income tax credit under HRS section 235-12.5, or the capital goods excise tax credit under HRS section 235-110.7;

(3) To avoid unnecessary imposition of costs on the ratepaying public, a renewable energy generator that obtains a feed-in tariff rate should not be able to obtain photovoltaic rebates under a program established by the commission pursuant to Act 151, Session Laws Hawaii 2008.

5. What evidence must the commission consider in establishing a feed-in tariff and has that evidence been presented in this investigation?

Statement of Position: The commission must consider evidence showing the effectiveness in other nations of feed-in tariffs – unlimited by annual caps, production caps (curtailment), size caps and expenditure caps limits -- in encouraging the rapid development of utility-distributed renewable electricity

generation at minimal cost to the public. The commission must consider evidence showing investor motivation to invest in the development of RE projects based on the specified FIT rates for the technology and size of the RE projects.

Role of Other Methodologies

6. What role do other methodologies for the utility to acquire renewable energy play with and without a PBFiT, including but not limited to power purchase contracts, competitive bidding, avoided cost offerings and net energy metering?

Statement of Position: A Proposal for Feed-in Tariff submitted herewith is intended to encourage rapid development of renewable electricity generation for utility distribution.

The Proposal for Feed-in Tariff submitted herewith is intended to replace the Competitive Bidding Framework for renewable electricity generation that is larger than 5 MW on the island of Oahu and larger than 2.7 MW on the islands of Maui and Hawaii.

The Proposal for Feed-in Tariff submitted herewith is intended to replace the "de-linked" rate (with avoided cost ceiling) provided by HRS section 269-27.2 for renewable energy generation that is smaller than 5 MW on the island of Oahu and smaller than 2.7 MW on the islands of Maui and Hawaii, and is intended to replace the Schedule Q (avoided cost) rate for renewable electricity generation that is smaller than 100 kW.

The Proposal for Feed-in Tariff submitted herewith is **not** intended to replace net energy metering for self-generation of renewable electricity.

Best Design for a PBFiT or alternative method

7. What is the best design, including the cost basis, for PBFiTs or other alternative feed-in tariffs to accelerate and increase the development of Hawaii's renewable energy resources and their integration in the utility system?

Statement of Position: The Proposal for Feed-in Tariff submitted herewith is the best design for a PBFiT to accelerate and increase the development of Hawaii's renewable energy resources and their integration in the utility system, because a feed-in tariff of this design has proven effective in Germany for achieving 14% renewable electricity generation production in 7 years at a cost to German ratepayers of about $.01/kWh. The Proposal for Feed-in Tariff is estimated to cost ratepayers approximately $.03/kWh to achieve 40% renewable electricity production in Hawaii, per the calculation shown in response to Issue No. 9 below.

Eligibility Requirements

8. What renewable energy projects should be eligible for which renewable electricity purchase methods or individual tariffs and when?

Statement of Position: Renewable energy projects using the following commercially-proven technology types should be eligible for technology-specific PBFiTs, payable over 20 year PBFiT contract terms:

Biomass or biogas
Geothermal energy
Landfill gas or sewage treatment plant gas
Hydropower
Photovoltaic
Concentrating solar
Onshore wind
Offshore wind

In addition to the attached feed-in tariff, we propose the following:
A baseline FIT rate for any fossil fuel free energy technology should be defined as follows. For firm energy a rate close to the average avoided cost of 2008, specific to each island. For variable energy the rate should be equivalent to the published rate for wind. Obviously, for the rapid deployment of renewable energy, we want to keep an open door for new technologies.
A FIT rate should be defined for grid-stabilizing measures, such as storage, anciliary green power and demand control. We are currently contacting experts all over the world on ways to define this.

Renewable energy projects developed by unregulated subsidiaries of the utilities should be permitted to qualify for the FIT because the utilities should be encouraged to deploy their financial and technological resources to accelerate the speed, enlarge the scale and decrease the cost to the public of renewable electricity development in the state of Hawaii. Allowing utility-developed projects to qualify for the FIT aligns the utilities' financial interests with rapid large-scale renewable energy development at low cost to the public. Of course, such utility involvement can only occur if there are no caps in the FIT.

Renewable energy projects with a nameplate capacity above 20 MW should be eligible for FIT on a "first ready, first to interconnect" basis, modeled after the interconnection queue management procedures of the Midwest ISO[1], including:

[1] *See* Working group for Investment in Reliable & Economic electric Systems (WIRES), Integrating Locationally-Constrained Resources Into Transmission Systems: A Survey of U.S. Practices (October 2008) http://www.wiresgroup.com/images/WIRES_Report_LCR.pdf ; 124 FERC ¶ 61,183, Midwest Independent Transmission System Operator, Inc., Docket No. ER08-1169-000, Order Conditionally Accepting Tariff Revisions and Addressing Queue Reform (August 25, 2008) http://elibrary.ferc.gov/idmws/doc_info.asp?document_id=13641108

(1) a pre-queue system planning and analysis phase, possibly including an "open season" for submission of interconnection requests (modeled after the California ISO procedure)

(2) a definitive planning phase in which a system impact restudy is performed, if necessary, as well as a facilities study; the system impact restudy permits interconnection requests to be routed to a "fast lane" to allow projects in unconstrained areas to proceed without delay

(3) the fee to enter the definitive planning phase is approximately double the expected actual cost of the restudy, with the excess used to cover the facilities study and costs incurred to re-study lower-queued projects if the generator drops out; unused balances are returned to the customer; study deposits are $30,000 for projects between 20 and 50 MW and $60,000 for projects larger than 50 MW

(4) entering into the definitive planning phase requires technical data and meeting milestones; required technical data are 1) a detailed stability model, 2) a definitive point of interconnection, 3) a one-line diagram showing ratings and impedance information for associated electrical equipment, 4) the definitive amount of capacity of the project, 5) recertification of site control, or, if the project has provided a $100,000 deposit in lieu of showing site control, the deposit becomes nonrefundable 10 business days after the start of the planning phase, and 6) any two of four other items; the four other items are i) documentation of an application for state or federal permits and a showing that the application is proceeding, ii) approval of the project by the commission, iii) approval from an independent board of directors of the applicant or a similar showing of organizational approval, or iv) security equal to the nameplate capacity times the rate for one month of drive-out point-to-point transmission service

(5) before the utility will start a facilities study, the generator must show that it has achieved one of the following additional milestones: 1) security for the cost of network upgrades as determined in the system planning and analysis review, 2) execution of a power sale agreement or an attestation that the project is included in a state resource adequacy plan or evidence that the generator will qualify as a designated network resource or 3) a demonstration that the turbines have been ordered

(6) permit suspension by the customer of the effectiveness of an executed interconnection agreement and of the utility's construction or installation of interconnection facilities or network upgrades only in cases of force majeure.

Analysis of the cost to consumers and appropriateness of caps

9. What is the cost to consumers and others of the proposed feed-in tariffs?

Statement of Position: The net ratepayer subsidy cost of a Hawaii FiT, assuming the utility meets the RPS goals set forth in the Agreement (40% by 2030), can be estimated as follows. In the white paper, *Feed-in Tariff Case Studies*, prepared for the U.S.Department of Energy and the State of Hawaii in support of the Hawaii Clean Energy Initiative[2], the author reports that the increased cost, as of 2008, to German ratepayers as a result of the German FiT has been €.007 (or US $.01) per kWh.[3] As of 2008, Germany had achieved approximately 14% of kWh from renewable sources, of which approximately ¾ came from wind and ¼ came from solar. If Hawaii establishes a feed-in tariff having the same FiT rates as the German FiT over the same 20 year term, and if the Hawaii utility meets the 40% by 2030 goal using wind and solar in the same proportion as Germany, it may be estimated that the increased cost to Hawaii ratepayers as a result of the Hawaii FiT would be about $.01/kWh multiplied by 40% divided by 14%, or about $.03/kWh. However, it is likely that there will be no extra costs, given the abundance of natural energy in Hawaii and the high cost of oil energy.

10. Should the commission impose caps based upon these financial effects, technical limitations or other reasons on the total amount purchased through any mechanism or tariff?

Statement of Position: The commission should not impose any caps on the total amount of renewable electricity purchased by the utility through a feed-in tariff, except that:

(1) purchase of renewable electricity generated from wind should be limited to purchases of electricity from wind generating facilities (onshore and offshore) having aggregate island-wide capacity that is no more than 25% of peak demand for such island,[4] and

(2) purchase of renewable electricity generated from solar radiation should be limited to purchases of electricity from photovoltaic and concentrating solar

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[2] Douglas Hinrichs, *Feed-in Tariff Case Studies: A White Paper in Support of the Hawaii Clean Energy Initiative* (Sentech, Inc. September 2008).

[3] Marcus Maedl, "The German FIT for Renewable Energy – A Bargain!" *Renewable Energy World* (April 14, 2008) http://www.renewableenergyworld.com/rea/news/reinsider/story?id=52126

[4] *See* B. Parsons, M. Milligan, J.C. Smith, E. DeMeo, B. Oakleaf, K. Wolf, M. Schuerger, R. Zavadil, M. Ahlstrom and D. Yen Nakafuji, "Grid Impacts of Wind Power Variability: Recent Assessments from a Variety of Utilities in the United States," National Renewable Energy Laboratory Conference Paper NREL/CP-500-39955 (July 2006) http://www.uwig.org/Ewec06gridpaper.pdf ; J.C. Smith, B. Parsons, T. Acker, M. Milligan, R. Zavadi, M. Schuerger and E. DeMeo, "Best Practices in Grid Integration of Variable Wind Power: Summary of Recent US Case Study Results and Mitigation Measures," presented at Europe Wind Energy Conference '07, Milan Italy (May 2007) http://www.wapa.gov/UGP/PowerMarketing/WindHydro/EWEC07paper.pdf.

power facilities having aggregate island-wide capacity that is no more than 50% of peak demand for such island.[5]

Island-wide grid penetration caps for intermittent RE are justified because it does not make sense to oblige the utility and ratepayers to pay for RE from intermittent sources (solar and wind) if such RE displaces no fixed generation from imported fuels because of the need to maintain such fixed generation to maintain present-day levels of grid reliability.

Annual caps, production caps (curtailment), size caps and expenditure caps on FiT-incentivized renewable electricity development would:

(1) increase the cost to the public of renewable electricity development by slowing the speed of renewable electricity development;

(2) increase the cost to the public of renewable electricity development by decreasing the size and scale of renewable electricity development;

(3) increase the cost to the public of renewable electricity development by increasing the price, revenue and customer risk and uncertainty of renewable energy project development;

(4) increase the cost to the public of any interruption in the delivery of oil to Hawaii by slowing the speed, limiting the size and increasing the cost to the public of renewable energy development in Hawaii; and

(5) increase the cost to the public of any interruption in the delivery of oil to Hawaii by perpetuating and prolonging Hawaii's dependence on imported oil for electric power generation.

Procedural Issues

11. What process should the commission implement for evaluating, determining and updating renewable energy purchased power mechanisms or tariffs?

Statement of Position: The commission should evaluate, determine and update, if necessary, the PBFiT schedule at intervals of every 3 years, to determine whether adjustments are appropriate based on economic, technological and market changes during the interval preceding the evaluation.

[5] *See* E. Liu and J. Bebic, "Distribution System Voltage Performance Analysis for High-Penetration Photovoltaics," National Renewable Energy Laboratory Subcontract Report NREL/SR-581-42298 (February 2008) http://www.nrel.gov/docs/fy08osti/42298.pdf ; R. Perez, R. Margolis, M. Kmiecik, M. Schwab and M. Perez, "Update: Effective Load-Carrying Capability of Photovoltaics in the United States," National Renewable Energy Laboratory Conference Paper NREL/CP-620-40068 (June 2006) http://www.nrel.gov/docs/fy06osti/40068.pdf .

The most important factor in the commission's evaluation, determination and updating of the PBFiT schedule should be the amounts of RE generating capacity (in MW) called forth by the FiT during the interval preceding the evaluation. Relatively small additions to generating capacity from a particular RE technology during the interval would be a signal that the FiT rate was set too low for that technology and might be increased for the next interval. Relatively enormous additions to generating capacity from a particular RE technology during the interval would indicate that the FiT rate was set too high for that technology and might be decreased for the next interval.

12. What are the administrative impacts to the commission and the parties of the proposed approach?

Statement of Position: The administrative impact to the commission and the Consumer Advocate of the FiT is staff time required to perform the review and approval of FiT agreements, and the triannual evaluation, determination and updating of FiT rates and categories.

The administrative impact to the utility parties of the FiT is the need to staff up with electrical engineers to engineer the interconnection of RE projects on a project-by-project basis.

The administrative impact to the renewable energy industry of the FiT is the reduction of administrative costs on a per-project basis because of the reduction of price, revenue and customer uncertainty and the reduction of delays in RE project development.

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DATED: Kihei, Hawaii, February 25, 2009

Chris Mentzel /by Erik Kvam

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Clean Energy Maui LLC

SCHEDULE FIT

Feed-in Tariff – Purchases from Renewable Energy Generating Facilities

Definitions:

For the purposes of this Schedule:

(1) "Biogas" means a gaseous fuel produced by anaerobic decomposition of organic matter.

(2) "Biomass" means aquatic or terrestrial plant material, vegetation, or agricultural waste, originating in the State of Hawaii, used as a fuel or energy source.

(3) "Company" means Hawaiian Electric Company, Inc.

(4) "Concentrating Solar Power Facility" means a Renewable Energy Generating Facility that generates electricity by concentrating Solar Radiation to heat a working fluid that drives a generator.

(5) "Electrical Capacity" means the installed maximum potential alternating-current electricity generating capacity, in kilowatts, of a Renewable Energy Generating Facility.

(6) "Hybrid Facility" means a Renewable Energy Generating Facility that generates electricity from two or more Renewable Energy Sources.

(7) "Hydropower" means the energy of moving water, including wave energy, ocean thermal energy conversion, and tidal energy.

(8) "Non-Wood-Burning Generating Facility" means a Renewable Energy Generating Facility that generates electricity from Biomass and that is not a Wood-Burning Generating Facility.

(9) "Offshore Wind Generating Facility" means a Wind Generating Facility that is located in an ocean water depth of at least 20 meters.

(10) "Onshore Wind Generating Facility" means any Wind Generating Facility that is not an Offshore Wind Generating Facility.

(11) "Photovoltaic Generating Facility" means a Renewable Energy Generating Facility that generates electricity from unconcentrated Solar Radiation.

(12) "Renewable Energy" means electricity generated by a Renewable Energy Generating Facility from a Renewable Energy Source.

(13) "Renewable Energy Generating Facility" means any identifiable facility, plant, installation, project, equipment, apparatus, or the like, located in the State of Hawaii, placed in service after the effective date of this Schedule, and that generates Renewable Energy from a Renewable Energy Source.

(14) "Renewable Energy Generator" means any person that owns, controls, operates, manages, or uses a Renewable Energy Generating Facility to produce Renewable Energy from a Renewable Energy Source.

(15) "Renewable Energy Source" means the following sources of energy:

(a) Biomass;
(b) Biogas;
(c) Geothermal Energy;
(d) Landfill Gas;
(e) Sewage Treatment Plant Gas;
(f) Hydropower;
(g) Solar Radiation;
(h) Wind.

(16) "Wood-Burning Generating Facility" means a Renewable Energy Generating Facility that burns wood to generate electricity.

(17) "Wind Generating Facility" means a Renewable Energy Generating Facility that generates electricity from Wind.

Interconnection

At the request of a Renewable Energy Generator that places a Renewable Energy Generating Facility in service, the Company shall interconnect such Renewable Energy Generating Facility to the electric system of the Company, provided that technical requirements set forth in the Company's Rules relating to interconnection of generating facilities with the Company's electric system, as approved by the Public Utilities Commission, are met. Costs incurred by the Company to meet technical requirements of interconnection shall be allocated so that those costs that benefit a Renewable Energy Generating Facility are borne by the Renewable Energy Generator that uses the Renewable Energy Generating Facility to produce Renewable Energy, in conformity with orders of the Public Utilities Commission relating to distributed generation in the State of Hawaii. Each of the Company and the Renewable Energy Generator shall disclose to the other, within 6 weeks of a request by the other, any and all data, relating to the electric system of the Company or the Renewable Energy Generating Facility of the Renewable Energy Generator, necessary to plan and execute such interconnection in conformity with such technical requirements.

A Renewable Energy Generating Facility shall be designed to operate in parallel with the Company's electric system without adversely affecting the operations of its customers and without presenting safety hazards to personnel of the Company or its customers. The Renewable Energy Generator shall furnish, install, operate and maintain facilities such as relays, switches, synchronizing equipment, monitoring equipment and control and protective devices designated by the Company and specified in the standard Schedule FIT Agreement ("Schedule FIT Agreement") as suitable for parallel operation with the electric system of the Company. The Renewable Energy Generating Facility and systems interconnecting the Renewable Energy Generating Facility with the Company's electric system must be in compliance with all applicable safety and performance standards of the National Electric Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), and the Company's requirements for distributed generation interconnected with the Company's electric system as provided in the Company's Rules, and subject to any other requirements, including payments, as provided in the Schedule FIT Agreement.

Requests to interconnect a Renewable Energy Generating Facility in parallel with the Company's electric system will be processed in accordance with the procedures in Appendix II.

Schedule FIT Agreement:

The Company shall offer a Schedule FIT Agreement, in the form provided in Appendix I, to any Renewable Energy Generator that requests interconnection of a Renewable Energy Generating Facility to the electric system of the Company under this Schedule. Each such Schedule FIT Agreement shall oblige the Company to take all Renewable Energy generated by the Renewable Energy Generating Facility and delivered to the electric system of the Company, and shall oblige the Company to purchase and pay for such Renewable Energy at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule. The Company shall compensate the Renewable Energy Generator for such Renewable Energy in an amount no less than the number of kilowatt-hours of such Renewable Energy multiplied by such rate of compensation.

With respect to Renewable Energy generated by a Hybrid Facility and delivered to the electric system of the Company, each such Schedule FIT Agreement shall oblige the Company to take all such Renewable Energy, and shall oblige the Company to purchase and pay for such Renewable Energy generated by the Hybrid Facility from each Renewable Energy Source at the feed-in tariff rate of compensation (in cents per kilowatt-hour) for such Renewable Energy set forth in this Schedule.

Procedures for requesting and executing a Schedule FIT Agreement are provided in Appendix II to this Schedule.

Metering:

The Company, at its expense, shall install a meter to record the flow of Renewable Energy delivered to the electric system of the Company. The Renewable Energy Generator shall, at its expense, provide, install and maintain all conductors, service switches, fuses, meter sockets, meter instrument transformer housing and mountings, switchboard meter test buses, meter panels and similar devices required for service connection and meter installations on the premises of the Renewable Energy Generating Facility in accordance with the Company's Rules.

Any energy delivered to a Renewable Energy Generator by the Company will be metered separately from any Renewable Energy delivered by the Renewable Energy Generator to the Company, either by use of multiple meters or a meter capable of separately recording the net inflow and outflow of electricity.

Purchase of Renewable Energy Delivered by a Renewable Energy Generator to the Company:

The Company shall pay for each kilowatt-hour ("kWh") of Renewable Energy delivered to the Company by a Renewable Energy Generator as follows.

Renewable Energy Source: Biomass	
Wood-Burning Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 150 kW	17.18
> 150 kW and ≤ 500 kW	13.51
> 500 kW and ≤ 5000 kW	12.18
> 5000 kW	11.45

Renewable Energy Source: Biomass	
Non-Wood-Burning Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 150 kW	28.00
> 150 kW and ≤ 500 kW	24.00
> 500 kW and ≤ 5000 kW	22.00
> 5000 kW	21.00

Renewable Energy Source: Biogas	
Renewable Energy Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 150 kW	17.18
> 150 kW and ≤ 500 kW	13.51
> 500 kW and ≤ 5000 kW	12.18

> 5000 kW and ≤ 20000 kW	11.45

Renewable Energy Source: Geothermal Energy	
Renewable Energy Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 10000 kW	23.49
> 10000 kW	15.41

Renewable Energy Source: Landfill Gas or Sewage Treatment Plant Gas	
Renewable Energy Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 500 kW	13.21
> 500 kW and ≤ 5000 kW	9.10

Renewable Energy Source: Hydropower	
Renewable Energy Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 500 kW	18.60
> 500 kW and ≤ 2000 kW	12.70
> 2000 kW and ≤ 5000 kW	11.23
> 5000 kW and ≤ 10000 kW	8.62
> 10000 kW and ≤ 20000 kW	7.93
> 20000 kW and ≤ 50000 kW	5.86
> 50000 kW	4.70

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Oahu Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 10 kW	47.9
≥ 10 kW and ≤ 100 kW	43.6
≥ 100 kW and ≤ 500 kW	39.6
≥ 500 kW and ≤ 5000 kW	36.3
≥ 5000 kW	33.0

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Maui Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 10 kW	52.7
≥ 10 kW and ≤ 100 kW	47.9
≥ 100 kW and ≤ 500 kW	43.6
≥ 500 kW and ≤ 5000 kW	39.9
≥ 5000 kW	36.3

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Molokai Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 10 kW	57.5
≥ 10 kW and ≤ 100 kW	52.3
≥ 100 kW and ≤ 500 kW	47.5
≥ 500 kW and ≤ 5000 kW	43.6

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Lanai Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 10 kW	57.5
≥ 10 kW and ≤ 100 kW	52.3
≥ 100 kW and ≤ 500 kW	47.5
≥ 500 kW and ≤ 5000 kW	43.6

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Hawaii Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 10 kW	53.7
≥ 10 kW and ≤ 100 kW	48.8
≥ 100 kW and ≤ 500 kW	44.4
≥ 500 kW and ≤ 5000 kW	40.7
≥ 5000 kW	37.0

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Oahu Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 500 kW	33.0
> 500 kW and ≤ 5000 kW	28.0
> 5000 kW and ≤ 10000 kW	25.0
> 10000 kW and ≤ 20000 kW	22.0

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Maui Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 500 kW	35.0
> 500 kW and ≤ 5000 kW	30.0
> 5000 kW and ≤ 10000 kW	27.0
> 10000 kW and ≤ 20000 kW	25.0

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Molokai Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 500 kW	38.0
> 500 kW and ≤ 5000 kW	33.0

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Lanai Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 500 kW	40.0
> 500 kW and ≤ 5000 kW	35.0

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Hawaii Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤ 500 kW	37.0
> 500 kW and ≤ 5000 kW	32.0
> 5000 kW and ≤ 10000 kW	29.0
> 10000 kW and ≤ 20000 kW	27.0

Renewable Energy Source: Wind	
Onshore Wind Generating Facility Years of Agreement Term	Feed-in Tariff Rate (¢/kWh)
Years 1 through 5	13.51
Years 6 through 20	7.37

Renewable Energy Source: Wind	
Offshore Wind Generating Facility Years of Agreement Term	Feed-in Tariff Rate (¢/kWh)
Years 1 through 12	22.02
Years 13 through 20	5.14

The Commission shall periodically adjust the Schedule FIT feed-in tariff rates of compensation in accordance with the procedures provided in Appendix III of this Schedule. The Renewable Energy Generator shall receive the feed-in tariff rate of compensation in effect at the time of execution of the Schedule FIT Agreement for the entire term of the Schedule FIT Agreement.

Term of Schedule FIT Agreement:

The term of the Schedule FIT Agreement will be as follows, commencing on the initial delivery of Renewable Energy under the Schedule FIT Agreement from the Renewable Energy Generator to the Company:

Renewable Energy Source	Term of Agreement
Biomass	20 years
Biogas	20 years
Geothermal Energy	20 years
Landfill Gas	20 years
Sewage Treatment Plant Gas	20 years
Hydropower	20 years
Solar Radiation	20 years
Wind	20 years

Net Energy Metering

A Renewable Energy Generator that is eligible to enter into a net energy metering agreement with the Company shall have a choice of either (1) entering into a net energy metering agreement with the Company, or (2) entering into a Schedule FIT Agreement with the Company.

Penetration Limits for Intermittent Renewable Energy Sources

The obligations of the Company to interconnect a Renewable Energy Generating Facility to the Company's electric system and to offer an Schedule FIT Agreement to a Renewable Energy Generator to purchase and pay for Renewable Energy at a feed-in tariff rate of compensation under this Schedule shall not apply with respect to Renewable Electricity produced by a Renewable Energy Generating Facility that is (i) a Wind Generating Facility, and that is placed in service after December 31 of the year following the year during which the aggregate Electrical Capacity of Renewable Energy Generating Facilities that are Wind Generating Facilities as to which technical requirements for interconnection have been met equals or exceeds 25 per cent of the peak demand for such electrical system, provided that the Public Utilities Commission may increase, by rule or order, such aggregate Electrical Capacity limit above 25 per cent of such peak demand, or (ii) a Photovoltaic Generating Facility or a Concentrating Solar Generating Facility, and that is placed in service after December 31 of the year following the year during which the aggregate Electrical Capacity of Renewable Energy Generating Facilities that are Photovoltaic Generating Facilities or Concentrating Solar Generating Facilities as to which technical requirements for interconnection have been met equals or exceeds 50 per cent of the peak demand for such electrical system, provided that the Public Utilities Commission may increase, by rule or order, such aggregate Electrical Capacity limit above the above-referenced 25 per cent and 50 per cent peak demands.

Queuing Procedures:

Requests for interconnection of Renewable Energy Generating Facilities under this Schedule shall be administered on a first-ready, first-to-interconnect basis, modeled after the queuing procedures proposed by the Midwest Independent Transmission System Operator, Inc. ("Midwest ISO") and conditionally accepted by the Federal Energy Regulatory Commission. *See* 124 FERC ¶ 61,183, Midwest Independent Transmission System Operator, Inc., docket No. ER08-1169-000, Order Conditionally Accepting Tariff Revisions and Addressing Queue Reform, August 25, 2008.

Renewable Energy Certificates:

Any certificate, credit, allowance, green tag, or other transferable indicia or environmental attribute, verifying the generation of a particular quantity of energy from a Renewable Energy Source, indicating the generation of a specific quantity of Renewable Energy by a Renewable Energy Generating Facility, or indicating a Renewable Energy Generator's ownership of any environmental attribute associated with such generation, is the property of the Renewable Energy Generator and freely assignable by the Renewable Energy Generator.

CERTIFICATE OF SERVICE

I hereby certify that I have this date filed and served the original and eight copies of the foregoing **OPENING STATEMENT OF POSITION AND PROPOSAL FOR FEED-IN TARIFF OF CLEAN ENERGY MAUI LLC** in Docket No. 2008-0273, by hand delivery to the Commission at the following address:

CARLITO CALIBOSO
PUBLIC UTILITIES COMMISSION
465 S. King Street, Suite 103
Honolulu, HI 96813

I hereby further certify that I have this date served two copies upon the following party of the foregoing **OPENING STATEMENT OF POSITION AND PROPOSAL FOR FEED-IN TARIFF OF CLEAN ENERGY MAUI LLC** in Docket No. 2008-0273, by causing such copies or copy thereof to be mailed, postage prepaid, and properly addressed to each such party as follows:

CATHERINE P. AWAKUNI
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DIVISION OF CONSUMER ADVOCACY
P.O. Box 541
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I hereby further certify that I have this date served one copy upon each of the following parties, of the foregoing certify that I have this date served one copy upon the following party of the foregoing **OPENING STATEMENT OF POSITION AND PROPOSAL FOR FEED-IN TARIFF OF CLEAN ENERGY MAUI LLC** in Docket No. 2008-0273, by causing each such copy thereof to be sent via e-mail in a portable document format ("pdf") to each such party as follows:

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DATED: Kihei, Hawaii, February 25, 2009

Chris Mentzel /by Erik Kvam
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